

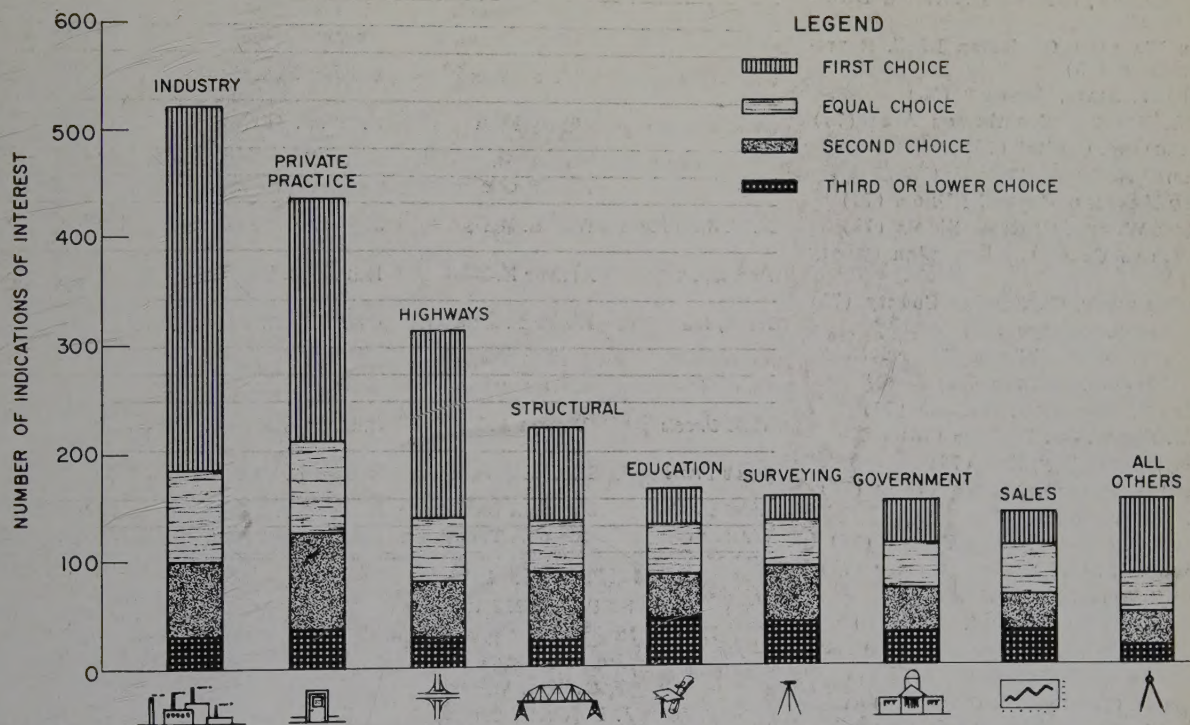


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Comparison of Total Indications of Interest in Functional Sections As Revealed by Survey

THE ILLINOIS ENGINEER

APRIL, 1960

VOLUME XXXVI, NO. 4



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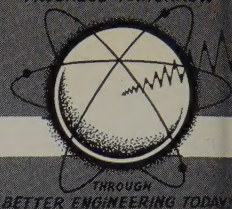


# THE ILLINOIS ENGINEER

ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS, Incorporated

Affiliated with the National Society of Professional Engineers

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## LETTER TO THE EDITOR

April 5, 1960

Illinois Society of Professional Engineers,  
714 Myers Building,  
Springfield, Illinois  
Gentlemen,

I want to protest against the enclosed cartoon from your magazine. It is distinctly in bad taste. Obviously, it would be, since it was drawn by Herblock, a known and confessed Communist. Since he believes that everything should be taken over by the Federal government because it would then be so much easier for a Commisar to take over, he naturally is opposed to any one who thinks that local authorities should take over as many responsibilities as they can. I hope you will use more thought in the future in the selection of your cartoons.

Yours truly,

Walter Mayer

EDITOR'S NOTE: We won't argue with Mr. Mayer on Herblock's cartoon, "He Always Leaves A Nice Clean Desk" (March, Illinois Engineer). For more than a year we have endeavored to get sufficient reader interest to create a "Letters to the Editor" Section of the magazine to no avail. Thanks to Herblock, we have now gotten the kind of response we wanted.

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YOU'RE AN ENGINEER — BUT ARE  
YOU A PROFESSIONAL?

By LOUIS BACON

First we must answer the question—is engineering a profession. This has long been a debated subject. I say that Engineering is a profession, but unfortunately the **American public does not recognize** it as one of the professions. We who call ourselves engineers, know that it is a profession we are practicing, but we also realize that many of our fellow graduates are not practicing professionally. These are the men who constantly gripe and complain about the public not recognizing engineers as professionals. However, these men are usually the ones that have done nothing to help correct this attitude. I submit that the trouble is not with the profession or with the engineering societies, but is with the individuals within the group. This person does not have a professional attitude outside of his immediate eight hour work day and maybe not even then. He does nothing or very little outside of this period to fulfill the duties of a professional.

The dictionary defines a profession as "an occupation that properly involves a liberal education or its equivalent, and mental rather than manual labor." Many authors have gone a little further, and one that I like was given by Carl F. Taeusch in his book "Professional and Business Ethics." He says "A profession consists of a limited and clearly marked group of men who are trained by education and experience to perform certain functions better than their fellow men." For my own definition, I prefer to add to Mr. Taeusch's some of the variations I have read over the years and come up with this rather all inclusive meaning. It is—

A profession consists of a limited and clearly marked group of men who are trained by education and experience to perform certain functions better than their fellow men. This group generates rules and regulations from within the group to govern the application of their special knowledge, they govern the conduct of their members by a Code of Ethics and the members are ready to serve society beyond just their specific duty to their client or employer.

Now lets see how engineering fits or adheres to this definition. In this day and age, most men practicing engineering have acquired their special knowledge by a formal education and experience. And certainly the engineering field is somewhat limited and is a clearly marked group even though it may not be publicly marked on as high a plain as we think it should be. Nevertheless, the public does recognize an engineer as someone who has had special schooling.

(Continued on Page 2)



The engineers generate rules and regulations from within their profession to govern the application of their special knowledge by the development of building codes and registration laws. Most engineering projects are regulated by building codes, safety codes, etc. These codes are usually written entirely or in part by the engineers themselves because they recognized the need for such restrictions for the protection of the public health, safety and welfare.

For the same reason of protecting the public, the engineering profession has been instrumental in getting registration laws passed in all states. These laws also help the engineers to prevent anyone from practicing who can not meet the minimum requirements. A truly professional engineer within the engineering world will show that he accepts his great responsibility to the public by becoming registered to practice his profession just as soon as he is legally qualified.

All of the founder engineering societies (who represent most of the engineers) and most of the other smaller engineering organizations have adopted Codes of Ethics which their members are sworn to uphold. All Codes of Ethics have the same two basic aims, that is, to guarantee the public a high degree of technical competence and honor in the conduct of professional business and at the same time to maintain a high standard of integrity and honesty within the profession itself. Beyond this every engineer should have his own individual Code of Ethics for not only his conduct of business and his dealings with his fellow employees, but for his personal conduct 24 hours of the day. Someone may be observing his actions at a PTA meeting, Church meeting, or Cub Pack meeting. If he doesn't conduct himself in a professional manner at all of these functions, he will not only give himself a bad reputation, but the profession he represents as well.

We have satisfied most of the requirements of the definition. Engineers are trained by education and experience. They are a limited and marked group, and they generate rules from within and they have Codes of Ethics. But what about their readiness to serve society beyond just their specific duty to their client or employer?

The engineers are qualified and able to serve their fellow men in ways much beyond their normal daily routine. This again depends upon the individual, but the **professional** men within the group were aware of this responsibility when they chose their life work. **They** are anxious to serve in a manner you might say is "above and beyond the call of duty" in other occupations. In my opinion, all men are obligated to serve in four areas of endeavor, but the professional people are especially obligated and dedicated to serve his fellow men in these regions. These areas are: Family, Community, Church, and Work.

Now let us examine each of these for an engineer. First the Family:

An engineer must carefully watch the division of his time so that he doesn't skimp on this responsibility. He can become so involved in the other areas of activity that he neglects his family. Of course this is bad for his family and it is also bad for the profession. However, most engineers being basically family men, fulfill this requirement without any trouble.

Secondly the Community:

An engineer can and many do, share his knowledge and experience for the benefit of his community, state or nation in a number of ways. He can seek a public office, accept appointment on committees or commissions or serve on civic advisory committees of the Engineering Society for the purpose of codes, planning, etc.

And how about the Church:

An engineer in discharging his duties to his church can once again offer his technical ability to assist in many problems that all churches are faced with almost daily. There are any number of committees within the church that can use an engineer.

And fourth, the Work:

For an engineer, his responsibilities to his world break down into **two** areas of obligation. First, to his place of employment, and second to his profession. In addition to the usual responsibilities an engineer owes to his employer, he should keep abreast of the technical developments in his field. He should also learn to make decisions and to not depend entirely on his supervisors for detailed guidance in his work. In this way he will be ready to assume more responsibility with the firm when they have need or are ready for him to do so.

As for his obligations to his profession, he should join and take an active part in a technical society and also a professional society. In this way he can show his professional self development and at the same time do his share to carry on the aims of his profession. Thereby he is also indirectly serving society by better preparation.

I believe you will agree that engineering fits into even my expanded definition of a profession, and thus should be called a profession. It is true that many parts of the definition depend upon the individual member within the profession, but this is true even in the three learned professions, law, medicine and theology.

Thus we have the framework of a profession, and now it is up to us, the members, to really make it a profession in the eyes and to the acceptancy of the public. As I said in the beginning, we realize that many of our fellow graduates are not practicing professionally. This happens in the other professions too, the professions that are more recognized by the public.

(Continued on Page 13)



# Society Activities



Salt Creek Chapter observed Ladies' Night, March 8th, with Fran Allison, TV star, as special guest. New officers were installed and Bob Ferguson was announced as State Nominee for Armco-NSPE Scholarship. Left to right, Bob Ferguson, Miss Allison, Wayne Reed, Dick Mitter, Paul Flood and King Creelman.

## SPECIAL BULLETIN !

### EISENHOWER AIDE WILL SPEAK AT CONVENTION

Several weeks ago, President Eisenhower was invited to be guest of honor and dinner speaker at the 75th Annual Dinner of ISPE. Because of the President's Russian trip in May, he had to decline the invitation. Robert Merriam, deputy assistant to the President, has accepted an invitation and will speak on the Current Defense Situation. Merriam is well known in Illinois. He was a recent candidate for Mayor in Chicago, and has taught at the University of Chicago and Northwestern University. The society is fortunate to have Mr. Merriman as dinner speaker May 6.



Salt Creek Chapter increased its membership to more than 100 which made it eligible for two representatives to the ISPE Board. Shown standing is Fred Sannaman congratulating newly elected director, Ralph Michael. Mrs. Michael is at left.



## NORTH SHORE CHAPTER SCORES ANOTHER "FIRST" WITH ENGINEER'S WEEK FASHION SHOW (Something For the Girls)

Engineers and their wives were treated to a rare display at the North Shore Chapter's (I.S.P.E.) Engineers Week Dinner-Dance held on Saturday, February 20, at the Officers' Club of the Glenview, Illinois, Naval Air Station.



Fireside fillies at North Shore Chapter doings' for Engineers' Week. Left to right, standing: Jane Nichols, Isabel Palmer, Demetra Panagos, Madame Baba and Chapter President Bill O'Brien. Seated, Pat Haase, Kay Duffy, Mary Nicholson and Isabelle Cannon.

More than a score of the latest fashion creations of Madame Baba, Wilmette, Illinois, couturier, were displayed by seven lovely models for the enjoyment of the ladies in the audience. Even more stoic males whistled and clapped for the styles—which ranged from flimsy strapless evening gowns through smart-looking business garb and casual cottons to vacation wear. The hour-long parade of beauties—both in fashions and in models—was described in a running commentary by moderator Kay Duffy from Chicago's Channel 11 television station.

Some sixty "Good-Time Charlies"—engineers, wives and guests—feasted, feted and frolicked in celebration of the 1960 observance of National Engineers Week. Not only was this slightly early event thought to be the country's first for the year, it is believed to be the first P. E. sponsored Fashion Show in Illinois and perhaps the first such P. E. meeting in the history of N.S.P.E.

It was pointed out that the Dinner-Dance also coincided with National Brotherhood Week. In view of this, President Bill O'Brien quipped to the wives that this was a good time to rephrase our "Week" to: "Be Kind to Engineers,—Week'."

After the fashion show feature, the crowd stayed to dance, mingle, and just have good conversation and get better acquainted. All of those in attendance agreed that Programmers Larry Donoghue and Leo Nicholson did an excellent job of production. And especial plaud-

its were accorded Madame Baba and models for making the entire evening such a rousing success. Three engineer-wives also served as poised and lovely models: Mary Nicholson, Pat Haase and Isabel Palmer.

The Northwest Suburban Chapter—the North Shore Chapter's twin in the recent expansion of the Chicago area's ISPE activity—was represented by an eight-person contingent, including Chapter President Bill Berk. Such a spirit of cooperation and good-fellowship cannot help but make the Illinois Society of Professional Engineers a better and even more closely knit organization than it has been in the past seventy-five years.

In March, the North Shore Chapter resumes its regular monthly meetings with a program devoted to the needs of modern metropolitan transportation facilities. Featured will be an explanation of the role of heliports by John L. Donoghue, Vice-President of the consulting firm of Ralph H. Burke, Inc., of Park Ridge, Illinois.



Activities of Joliet Chapter during Engineers' Week included awarding \$50 savings bonds to four outstanding mathematics and science high school students. Shown, left to right, D. Larson, Engineers' Week Chairman; Miss E. Onderisin, student; President Jim Gates; G. Klett, student; L. Esworthy, student; W. S. Gray, National Director and principal speaker; T. Comerford, student; and P. Brummond, corporation counsel for the City of Joliet.



Ken Waltz, left, who is retiring as editor of the Joliet Chapter bulletin after seven years, is shown receiving an NSPE tie clasp from Chapter President Jim Gates. Ken is a past president of the chapter and is currently a chapter representative to the ISPE Board of Direction.



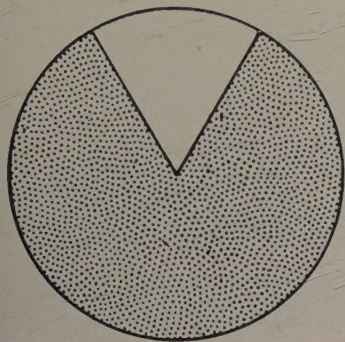
# RESULTS OF I.S.P.E. SURVEY POINTS TO INTEREST IN FUNCTIONAL SECTIONS

## SUMMARY OF ALL INDICATIONS RECEIVED:

There were a grand total of 2,268 indications on the 1,235 returned forms.

### 174 of 1026 1-st CHOICE

#### SELECTIONS FOR HIGHWAY FUNCTIONAL SECTION



## HIGHWAY FUNCTIONAL SECTION:

The interest in this section reflects the large amount of activity in highway construction. Many consultants, material suppliers and engineers in sales of machinery and related products showed first preference for this section. Of the 1,026 First choice comprised only 8% of selected this functional section.

## INDUSTRIAL FUNCTIONAL SECTION:

There were 50% more first choice indications for this section than for any other.

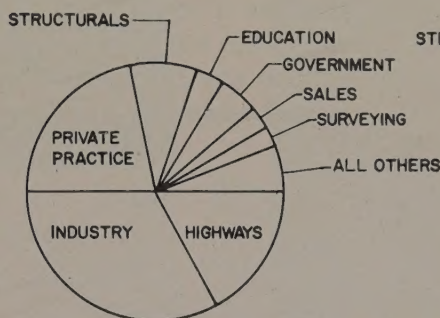
## ENGINEERS IN PRIVATE PRACTICE:

For years Engineering Societies have been led by Engineers in Private Practice. More than half of the total expressing any interest in this Functional Section indicated that this was their first choice. These 225 comprised 22% of all first choice indications in the survey.

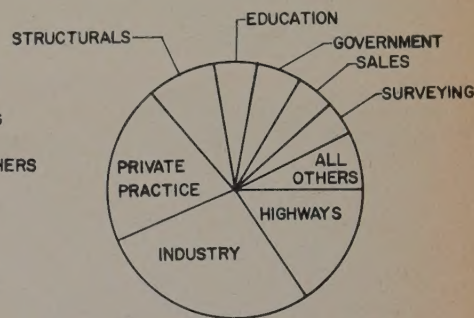
This report summarizes the answers and presents the findings of a survey addressed to all members of the Illinois Society of Professional Engineers. The report is based on a questionnaire which was mailed with dues notices to some 3,200 of which 75 per cent are National or State members. Answers were received from 1,235 (33 per cent of those queried).

The compiled data received from the survey have been reduced as much as possible to graph form to present consolidated and easily compared results. The tabulated data used in the preparation of the graphs are included at the end of this report.

Although the survey instructions requested the respondent to number his preference, if his interests fell under more than one of the categories listed, there were 485 of 2,268 indications (about 21 per cent) who indicated interest in more than one category but gave no preference. A comparison between the "first choice" indications and the "first choice plus equal choice" indications is shown on the following chart:



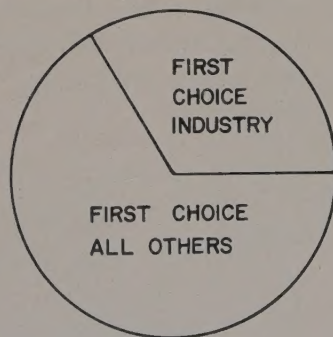
FIRST CHOICE



(FIRST + EQUAL CHOICE)

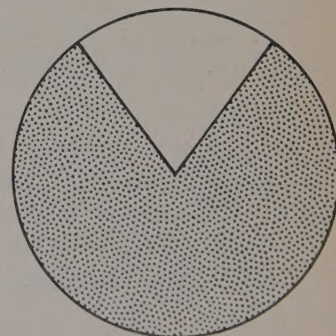
### FIRST CHOICE VS (FIRST + EQUAL CHOICE)

Although there is little difference between the percentage of those indicating interest in the Highway and Private Practice Functional Sections, the inclusion of the equal choice ballots decreases the percentage of overall interest in the Industrial Functional Section.



338 of 926 FIRST CHOICE SELECTIONS INDICATED FIRST PREFERENCE FOR ENGINEERS IN INDUSTRY FUNCTIONAL SECTION

### 225 of 1026 1-st CHOICE SELECTIONS FOR PRIVATE PRACTICE FUNCTIONAL SECTION



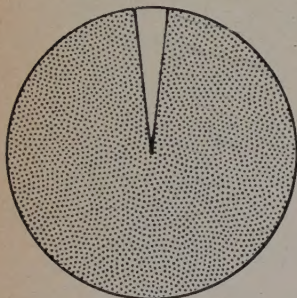


## FUNCTIONAL SECTION FOR SURVEYORS:

Although there was little interest (only 24 of 1,026 first choice indications) the large number of "equal choice," "second choice" and "third or lower choices" showed considerable interest in this as yet unorganized functional section.

These consisted of engineers who suggested the functional sections in which they were interested. Some lack of understanding of the purposes of functional sections (i.e. to solve *non-technical* problems of professional engineers, registered structural engineers and registered land surveyors) was indicated not only in these selections but throughout the voting in all of the other categories.

24 of 1026 FIRST CHOICE  
SURVEYORS

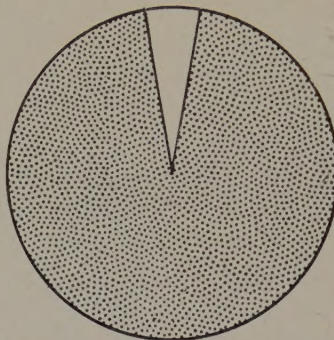


OVER 7% of TOTAL INDICATIONS  
SHOWED INTEREST IN FORMATION  
OF SURVEYING FUNCTIONAL  
SECTION. ONLY 2.8% LIST IT  
AS FIRST CHOICE.

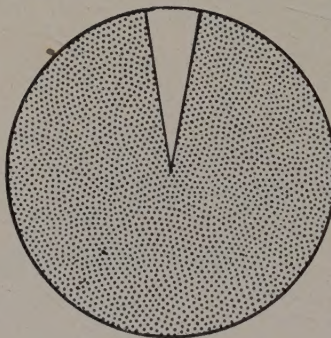
## FUNCTIONAL SECTION FOR REGISTERED STRUCTURAL ENGINEERS:

The survey instructions failed to inform the membership that membership in this functional section is limited to registered structural engineers in Illinois. Over 62% of the interest expressed in this Section was divided interest shared with other functional sections. First choice comprised only 8% of the 1,026 indications for first preference.

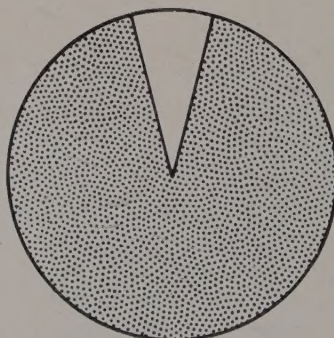
## 3.5% FIRST CHOICE SELECTIONS INTERESTED IN FORMATION OF SECTION FOR ENGINEERS IN EDUCATION



45 of 1026 FIRST CHOICE  
SELECTIONS FOR A NEW  
SECTION FOR ENGINEERS  
IN GOVERNMENT



8% FIRST CHOICE SELECTIONS  
FOR FUNCTIONAL SECTION FOR  
REGISTERED STRUCTURAL  
ENGINEERS

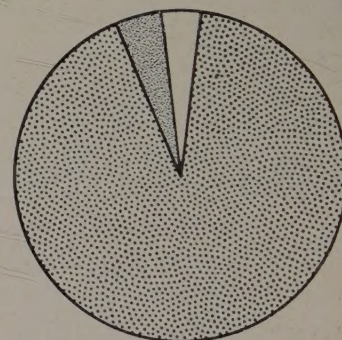


## ENGINEERS IN EDUCATION:

Although there is no existing functional section for this group of engineers, there were 168 which showed some indication of interest in the field. This category was similar to that for Engineers in Sales and Engineers in Surveying in that the indications of "second choice," "third choice" or "lower" and off "equal choice" were high. In this case they were higher for equal choice, second choice and third or lower choice than for first choice.

## ENGINEERS IN GOVERNMENT:

There were 45 of 1,026 first choice indications which selected this as yet unorganized functional section. Almost the same number included it as an "equal choice" or as "second choice."



OVER 6% of the 2268 TOTAL  
INDICATIONS SHOWED INTEREST  
IN FUNCTIONAL SECTION FOR  
ENGINEERS IN SALES, BUT LESS  
THAN 3% AS FIRST CHOICE

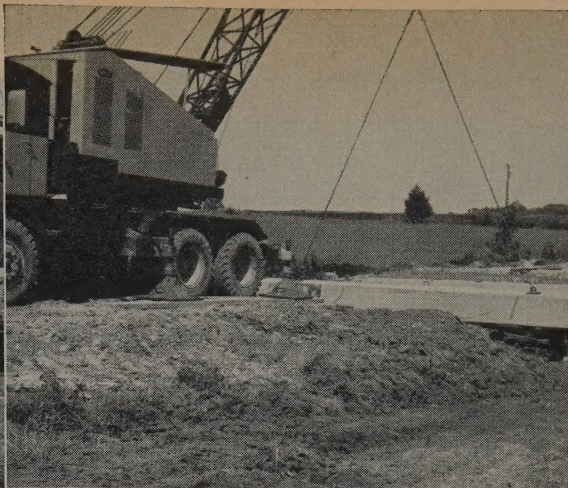
## ENGINEERS IN SALES:

Only 3% of the 1,026 first choice indications showed preference for this Functional Section. A spot check of the returns indicated many engineers who are in sales engineering preferred alliance with one of the other functional sections. There were 112 of the 141 indications of interest in this section which were "equal choice," "second choice" and "third or lower choice."

(Continued on Pages 9 and 10)



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**Tolerances** ... depth  $\frac{1}{8}$ "; length  $\frac{1}{4}$ " in 10'.

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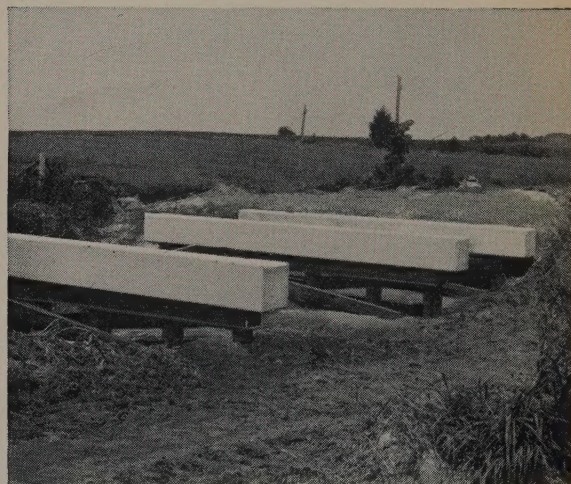
**Precast Caps** ... dowel holes, crowns, and levelling screws are provided for use with all types of precast caps.

**Precast Piling** ... 14", 16" in stock; 12" and 18" also available.

**Transverse Bridge Slabs** ... precast complete with crowns and levelling screws ... for long span structures and heavy-duty temporary bridges.

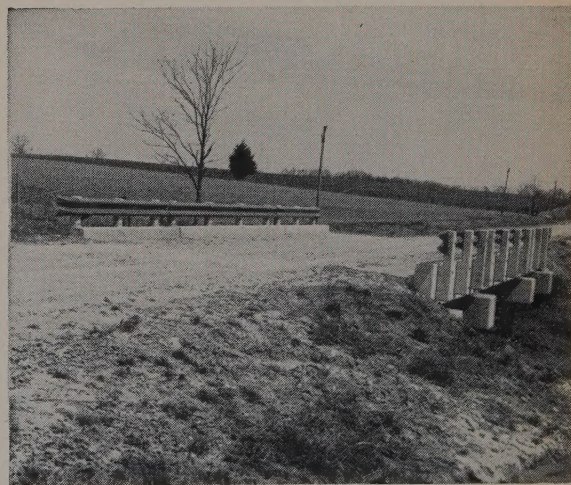
*Temporary bridges are also available for rent.*

\*Details on request



▲ *Caps in place*

*Three-span bridge ready for traffic ▼*



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**TELLERS COMMITTEE REPORT**

The Tellers Committee, appointed by acting President, L. D. Hudson under date of February 23, 1960, met at the Society Office on March 12, 1960, for the purpose of counting ballots for the 1960 election. Twelve ballots received after the count by the Committee but before noon on March 14, were counted by the Committee Chairman. The following is a report of the ballot count:

**For President**

LeVerne D. Hudson.....	955
Mitchell J. Alster.....	3
C. J. McLean.....	1

**For Vice-President:**

Linas H. Brown.....	891
Manuel Garcia .....	853
Harold F. Sommerschild.....	870
C. Dale Greffe.....	1
Rob Roy .....	1
Harry P. Watson.....	1
Louis Bacon .....	1
Henry Miller .....	1
William T. Hooper.....	1

**For Secretary:**

John E. Housiaux.....	943
Mitchell J. Alster.....	1
Robert Schwartz .....	1
John Gardner .....	1

**For Treasurer:**

R. D. Collins.....	939
Howard Verduin .....	1

**For National Director — 1 year term:**

Melvin E. Amstutz.....	928
C. J. McLean.....	1
George Chlebicki .....	1
Sidney Danoff .....	1

**For National Director — 2 year term:**

Frank W. Edwards.....	918
Clifford E. Missman.....	828
Alvis Sanders .....	1
Marvin Rothman .....	1
Andrew Neureuther .....	1

**For National Director — 3 year term:**

William S. Gray.....	920
L. T. Tokarz.....	1

**For Illinois Engineering Council Representatives:****1 year term**

Kenneth E. Welton.....	936
Robert I. Geyer.....	
W. A. Oliver.....	
R. J. Worel.....	
Herbert Miller .....	

**2 year term**

J. D. Voorhees.....	936
J. P. Murphy.....	

**3 year term**

R. H. Renwick.....	911
F. S. Weir.....	
Howard DePree .....	
Dwain Wallace .....	
J. Raymond Carroll.....	
A. Douglas Spicer.....	

**Article V — Dues**

Yes .....	656
No .....	297

A total of 40 ballots received were not counted for the following reasons:

Deceased .....	1
E I T.....	5
Delinquent .....	5
No name.....	28
Received late.....	1

Respectfully Submitted,

**TELLERS COMMITTEE, ISPE**

Francesco Valdez  
Nathan Wilcoxon  
Hermaz Vania  
Frank Madonia  
Charles Ritchie, Chairman



Pictured at Capital Chapter Engineers' Week Dinner are left to right: H. M. Vania and Mrs. H. M. Vania, R. J. Furbeck and Mrs. R. J. Furbeck.



# Comparison of Total Indications of Interest in Functional Sections As Revealed by Survey

TABLE I.

## ANALYSIS OF FIRST PREFERENCE FOR HIGHWAY FUNCTIONAL SECTION

Highway first or only choice.....	174
Only choice .....	91
Industry 2nd choice.....	9
Private Practice 2nd choice..	12
Structural 2nd choice.....	17
Education 2nd choice.....	4
Government 2nd choice.....	16
Sales 2nd choice.....	1
Surveying 2nd choice.....	16
Other .....	8

174

TABLE I-A.

## ANALYSIS WHERE HIGHWAY FUNCTIONAL SECTION GIVEN EQUAL PREFERENCE WITH OTHER SECTIONS

Highway and equals.....	58
Highway and government equal .....	12
Highway and industry equal..	2
Highway and Education equal	3
Highway and Surveying equal	12
Highway and other equal....	6
Highway and government and one more equal.....	5
Highway and Industry and one more equal.....	2
Highway and Private Practice and one more equal.....	3
Highway and 2 others equal..	1
Highway and 3 others equal...	8
Highway and 4 others equal..	4

58

TABLE II.

## ANALYSIS OF QUESTIONNAIRES WITH FIRST PREFERENCE FOR INDUSTRIAL FUNCTIONAL SECTION

Industry first or only choice.....	338
Only choice .....	205
Highway 2nd choice.....	3
Private Practice 2nd choice..	41
Structural 2nd choice.....	19
Education 2nd choice.....	23
Government 2nd choice.....	10
Sales 2nd choice.....	27
Surveying 2nd choice.....	4
Other 2nd choice.....	6

338

TABLE II-A

## ANALYSIS OF QUESTIONNAIRES WHERE INDUSTRIAL FUNCTIONAL SECTION GIVEN EQUAL PREFERENCE WITH OTHER SECTIONS

Industry and equals (except highway)	72
Industry and Government equal .....	6
Industry and Education equal	13
Industry and Sales equal....	19
Industry and Private Practice equal .....	10
Industry and Structural equal .....	4
Industry and Surveying equal	1
Industry and one other equal..	3
Industry and 2 equal.....	11
Industry and 3 equal.....	4
Industry and many equal....	1

72

## RECOMMENDATIONS

It is recommended that the appropriate returns be turned over to the leadership in each of the existing functional sections. In the case of those areas for which sections have not been formed, leadership must be uncovered and the returns may prove valuable not only in uncovering this leadership but as a tool for organization. Although many names are illegible, there are enough names which could form a nucleus for leadership and inspired action for the establishment of grass roots functional committees and sections both on the local and state levels.

## SUMMARY OF ALL INDICATIONS RECEIVED

	Industry	Private Practice	Highways	Structural	Education	Surveying	Government	Sales	Other
FIRST CHOICE....	338	225	174	83	37	24	45	29	71
EQUAL CHOICE...	82	83	58	49	46	45	42	45	35
SECOND CHOICE..	69	89	52	65	43	52	41	36	31
THIRD or LOWER ORDER CHOICE ..	30	36	29	24	42	40	30	31	17
TOTAL INTEREST EXPRESSED .....	519	433	313	221	168	161	158	141	154

Grand total of 2,268 indications on 1,235 returned forms.

TABLE III

## ANALYSIS OF FIRST PREFERENCE FOR PRIVATE PRACTICE FUNCTIONAL SECTION

Private Practice 1st or only choice..	225
Private Practice only.....	113
Highway 2nd choice.....	24
Industry 2nd choice.....	18
Structural 2nd choice.....	24
Education 2nd choice.....	6
Government 2nd choice.....	5
Sales 2nd choice.....	4
Surveying 2nd choice.....	26
Other 2nd choice.....	5

225

TABLE III-A

## ANALYSIS WHERE PRIVATE PRACTICE GIVEN EQUAL PREFERENCE WITH OTHER SECTION(S)

Private Practice and equals (except Highway and Industry).....	46
Private Practice and structural	9
Private Practice and education	7
Private Practice and government .....	2
Private Practice and sales...	4
Private Practice and surveying .....	14
Private Practice and one other .....	5
Private Practice and structural and one more equal..	4
Private Practice and education and one more equal...	1

46

TABLE IV.

## ANALYSIS OF FIRST PREFERENCE FOR FUNCTIONAL SECTION FOR REGISTERED STRUCTURAL ENGINEERS

Structural 1st or only choice.....	83
Only .....	34
Highway 2nd choice.....	7
Industry 2nd choice.....	15
Private Practice 2nd choice..	12
Education 2nd choice.....	6
Government 2nd choice.....	2
Sales 2nd choice.....	1
Surveying 2nd choice.....	3
Others 2nd choice.....	3

83

TABLE IV-A.

## ANALYSIS WHERE STRUCTURAL FUNCTIONAL SECTION GIVEN EQUAL PREFERENCE WITH OTHER SECTION(S)

Structural and equals (except Highway, Industry and Private Practice) .....	12
Structural and Education equal .....	3
Structural and Government equal .....	3
Structural and Sales equal...	2
Structural and Surveying equal .....	1
Structural and 2 more equal..	3

12



**TABLE V.**  
**ANALYSIS OF FIRST PREFERENCE**  
**FOR A PROPOSED FUNCTIONAL**  
**SECTION FOR ENGINEERS IN**  
**EDUCATION**

Education 1st or only choice.....	37
Only .....	15
Highway 2nd choice.....	2
Industry 2nd choice.....	5
Private Practice 2nd choice..	5
Structural 2nd choice.....	2
Government 2nd choice.....	6
Other .....	2

37

**TABLE V-A**  
**ANALYSIS WHERE A PROPOSED**  
**FUNCTIONAL SECTION FOR EN-**  
**GINEERS IN EDUCATION GIVEN**  
**EQUAL PREFERENCE WITH OTHER**  
**SECTION(S)**

Education and equals (except highways, industry, private practice and structural).....	4
Education and Government equal .....	1
Education and Sales equal..	1
Education and Surveying equal .....	2

4

**TABLE VI.**  
**ANALYSIS OF FIRST PREFERENCE**  
**FOR A PROPOSED FUNCTIONAL**  
**SECTION FOR ENGINEERS IN**  
**GOVERNMENT**

Government 1st or only choice.....	45
Only choice .....	29
Highways 2nd choice.....	5
Industry 2nd choice.....	5
Private Practice 2nd choice..	2
Education 2nd choice.....	1
Surveying 2nd choice.....	1
Others 2nd choice.....	2

45

**TABLE VI-A.**  
**ANALYSIS WHERE A PROPOSED**  
**FUNCTIONAL SECTION FOR EN-**  
**GINEERS IN GOVERNMENT GIVEN**  
**EQUAL PREFERENCE WITH OTHER**  
**SECTION(S)**

Government and equals (except Highway, Industry, Private Practice, Structural and Education).....	5
Government and sales equal..	2
Government and Surveying equal .....	1
Government and one other equal .....	2

5

**TABLE VII.**  
**ANALYSIS OF FIRST PREFERENCE**  
**FOR A PROPOSED FUNCTIONAL**  
**SECTION FOR ENGINEERS**  
**IN SALES**

Sales first or only choice.....	29
Only choice .....	10
Highways 2nd choice.....	1
Industry .....	9
Private Practice 2nd choice..	5
Structural 2nd choice.....	1
Education 2nd choice.....	2
Government 2nd choice.....	1

29

**OTHER FUNCTIONAL**  
**SECTIONS:**

Had the survey form suggested construction, utilities, or railroads, there would no doubt have been a stronger indication of interest in establishing functional sections for engineers in this employment.

**TABLE VII-A.**  
**ANALYSIS WHERE A PROPOSED**  
**FUNCTIONAL SECTION FOR EN-**  
**GINEERS IN SALES GIVEN EQUAL**  
**PREFERENCE WITH OTHER**  
**SECTION(S)**

Sales and equals (except Highway, Industry, Private Practice, Structural, Education and government) .....	3
Sales and one other equal....	3

3

**TABLE VIII.**  
**ANALYSIS OF FIRST PREFERENCE**  
**FOR A PROPOSED FUNCTIONAL**  
**SECTION FOR SURVEYORS**

Surveying 1st or only choice.....	24
Only choice .....	11
Highways 2nd choice.....	4
Private Practice 2nd choice..	7
Structural 2nd choice.....	1
Other 2nd choice.....	1

24

**TABLE IX.**  
**ANALYSIS WHERE A PROPOSED**  
**FUNCTIONAL SECTION SUG-**  
**GESTED BY RESPONDENT TO**  
**QUESTIONNAIRE**

OTHER—First or only choice.....	80
Construction and Contracting	16
Sanitary and Sewer.....	12
Utilities .....	12
Water Supply, Filtration, etc.	5
Fire and Safety.....	5
Communications .....	4
Electrical .....	3
Hydro Power, Hydraulics, Irrigation .....	3
Management and Adminis- tration .....	3
Railways .....	2
Maintenance and Operations.	1
Military .....	1
Patents and Inventions.....	1
Ground Water.....	1
Building Codes .....	1
Coal Mining .....	1

71

NO CHOICE..... 9

80

**2ND CHOICE OF THIS GROUP:**

Industry .....	8
Highway .....	6
Private Practice .....	5
Sales .....	3
Surveying .....	2
Structural .....	1
Education .....	1
Government .....	1
Other .....	4

The survey was sponsored by the Functional Sections Committee and administered by this Committee ably assisted by a subcommittee which tabulated and analyzed the returns and by the office staff of the Illinois Society of Professional Engineers. The members of the 1959-60 Functional Sections Committee which developed the basic plan and the questionnaire were Linas H. Brown, P.E., chairman; Louis A. Bacon, and Arnold A. Lundgren. Members of the subcommittee which analyzed the questionnaires were Ingvar Schousboe, chairman, and Elmer L. Major.

*REMEMBER . . .*

**The I. S. P. E. Diamond Jubilee**  
**Exposition Convention**

**MAY 4-8**

**SPRINGFIELD**



## E. J. BROWN, ELECTED

### PRESIDENT OF A.R.E.A.

E. J. Brown, chief engineer of the Burlington Railroad, was elected president of the American Railway Engineering Association at its annual meeting March 15, at the Sherman Hotel in Chicago. During the past year, he served as vice president, and previously he was a director of the organization for three years.



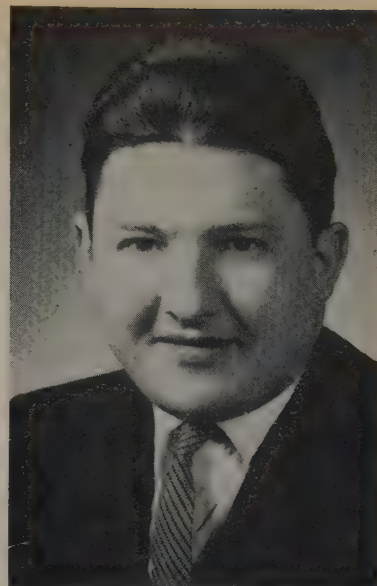
E. J. Brown

Mr. Brown, a native of St. Joseph, Missouri, joined the Burlington in 1918 as a clerk in the mechanical department at Chicago. In the course of his career with the company, he has had assignments in the Engineering and Operating Departments at Chicago, Aurora, Beardstown, Galesburg, Illinois, and LaCrosse, Wisconsin. He has been chief engineer, with headquarters at Chicago for the past five years.

The AREA, whose membership is international in scope, is dedicated to the advancement of modern railroad engineering practices. Its purpose is the advancement of knowledge pertaining to the scientific and economic location, construction, operation, and maintenance of railways.

Mr. Brown and his wife Alice, reside at 543 S. Blackstone in LaGrange, Illinois, and they have two sons.

Mr. Harold Mosler, President of NSPE was one of the Principal Speakers during the Convention of AREA.



CARLOS HIDALGO

Carlos Hidalgo, who has announced entering into private practice as a Consulting Engineer specializing in heating, air conditioning, ventilating, refrigerating and general plant engineering. Mr. Hidalgo is a graduate Mechanical Engineer from Illinois Institute of Technology and is a Registered Professional Engineer of Illinois. He has a Certificate of Specialized Training in Air Conditioning from Carrier Corporation and also attended the Graduate School of Business Administration of New York University.

Mr. Hidalgo has been actively engaged in air conditioning work for ten years, having had experience in the engineering design and the practical application of heating and air conditioning systems to residential, commercial and industrial buildings.

He has been employed with the International Division of Carrier Corporation for six years and, prior to that, was employed in the Plant Engineering Department of The Celotex Corporation in Chicago, Illinois. His last employment was with the Stiles Brothers Company of Waukegan as a Supervising Engineer.

Mr. Hidalgo has had the opportunity to travel extensively in Europe, Africa and South America and speaks fluent Spanish and French.

He is a member of the American Society of Heating, Refrigerating and Air Conditioning Engineers, the National Society of Professional Engineers, University Club of Waukegan, Waukegan-North Chicago Chamber of Commerce and Armed Forces Management Association.

Mr. Hidalgo is the only Consulting Engineer practicing his specialty from the Waukegan area. He lives at 311 Longview Road, with his wife and two daughters.



## BLOOMINGTON AREA CHAPTER PROFESSIONAL ENGINEERS ELECT

C. Lee Rhodes, P.E., was elected President of the Bloomington Area Chapter of Illinois Society of Professional Engineers (ISPE) at the Chapter's regular meeting last night. The year-old Chapter numbers 47 P.E.'s who represent 17 of the area's engineering, manufacturing, construction, and governmental organizations. The ISPE is affiliated with the National Society of Professional Engineers (NSPE); the purpose of these societies is to advance the Public Welfare, Public Safety,

and the Engineering Profession. Their concern is the social, economic and professional aspects of Engineering rather than the technical. Fifty-two thousand of the nation's Professional Engineers now belong to NSPE.

Mr. Rhodes is a Mechanical Engineering graduate of University of Illinois and is a Line Engineer with the General Purpose Control Department of General Electric Company here. He is commanding officer of the U. S. Naval Reserve Communications Company in Bloomington; member of Arts & Crafts Masonic Lodge and Bloomington Consistory. A native of Sullivan, Illinois, Mr. and Mrs. Rhodes and their two boys live at 12 Norbloom Avenue in Bloomington.

Vice President-elect is Donald W. Ferguson, P.E., Bloomington City Engineer; a Civil Engineering graduate of Iowa State University.

Secretary-Treasurer-elect is H. B. Elder, P.E., Mechanical Engineering graduate of Washington University (St. Louis) and an Engineer with the Bloomington General Electric Plant. Roy Trimble,

P.E., was elected the Chapter's alternate member on the ISPE Board of Direction.

Chapter Directors for the coming year include the new officers; Sam Wylie, P.E. (Farnsworth & Wylie), and Gene Moody, P.E. (Bloomington City Manager), past Presidents; and Merle Burgin, P.E. (Bloomington Director of Utilities), member of ISPE Board of Direction.



C. Lee Rhodes

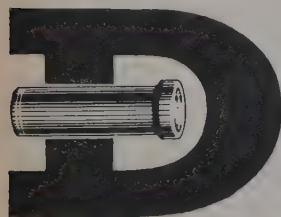
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**HAVE YOU ASKED  
ANOTHER ENGINEER  
TO JOIN I.S.P.E.?**



## SHORT COURSE ON WATER WELL ANALYSIS

Methods currently used by the Illinois State Water Survey to analyze and interpret pumping test data will be the subject of a short course May 10-11, at the Urbana Campus of the University of Illinois.

Sponsored jointly by the State Water Survey and the University's Extension Division, the Short Course on Evaluation of Wells and Aquifers is planned primarily for engineers and specialists interested in ground water. The two-day course will be conducted as a series of lectures, and a problem session will also be held each day.

Topics to be discussed as part of interpretation of pumping test data include unsteady state flow, boundary conditions, and sustained yield.

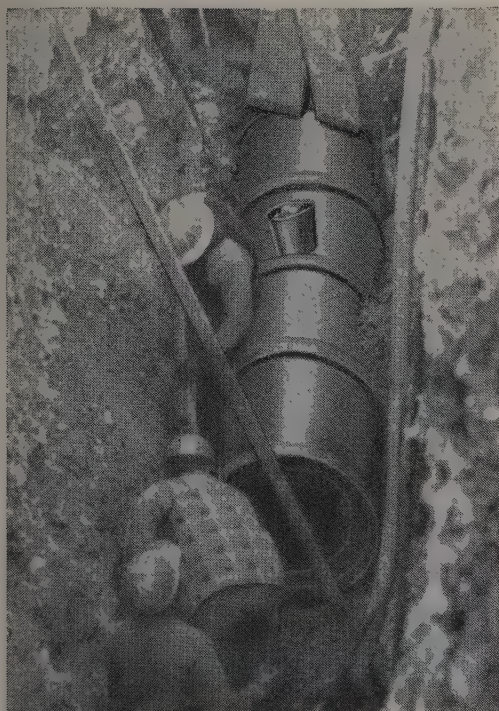
Additional information about the short course can be obtained from the State Water Survey, Box 232, Urbana, Illinois.

## YOU'RE AN ENGINEER—

(Continued from Page 2)

In the law profession they are called ambulance chasers, and in the medical profession they are called quacks. If only the public recognized engineering as a profession more so than it does, we would have fewer "quacks" within our group and we could do an easier job of policing our profession. Of course this would not eliminate all unprofessional people from our ranks. However, it would help a great deal in getting an easier public acceptance of our professional reasons for non-bidding policies, non-advertising policies, standard fee schedules and other professional approaches to work requested and payment for services rendered. When the public accepts these policies, then fewer engineers will feel that they are forced to act unethically just so that they can feed their families.

You and I can help to correct this impression in the public's mind by following a very easy and simple formula. If we will all merely follow and rigorously fulfill the requirements as set forth in the definition of a profession, the public will begin to notice and respect engineers for their value to mankind. When this is done universally, our acceptance as a profession will be automatic.



Moline, Ill. The 56,844 feet of 8 to 24 inch pipe laid with Streator's new Amvit Joint was a particularly "wet" job with highly unfavorable ground conditions.

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### with Streator's New Amvit Plastic Joint

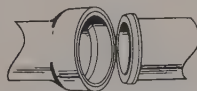
Contractors, engineers, city fathers need no longer fear the loss of time and money—or reputation—through unfavorable ground conditions. Streator's new Amvit Joint snaps together and seals permanently in seconds—under any condition. Here is a combination of the finest clay pipe available and one of modern science's most enduring plastics—your guarantee to lasting, dependable protection against any form of sewer failure.

**Contractors—** Protect your reputation and save on installation time and expense. Use tighter, stronger (plastic) seal compression joints—easier, faster installation with fewer pieces, longer lengths.

**Engineers—** Reduce the size and cost of new disposal plants by specifying infiltration-proof sewers. Use only the pipe size required to carry actual sewage flow.

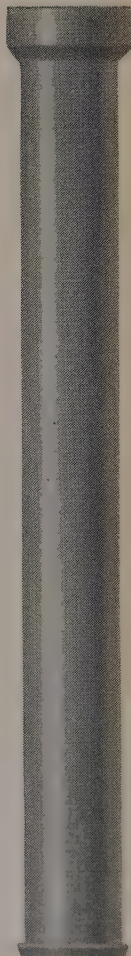
**Homeowners—** Enjoy long, trouble-free service even in root-infested areas. Your sewer line need never clog nor be replaced during your lifetime.

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For more information on Streator Clay Products, write or call Streator Drain Tile Company, Streator, Illinois.





# Mayor Daley Presents Award to Dolio



Albert G. Freiman, John Dolio, Mayor Daley, George Chlebicki, Clifford Abraham, and John Duba

## CHICAGO CHAPTER SPONSORS CONTEST

The Chicago Chapter of the Illinois Society of Professional Engineers is sponsoring a contest for the best essay to be submitted by a Chicago Junior or Senior High School student on the subject: "What is an Engineer."

Professor Clarence H. Zacher, Purdue University, Calumet Center, and Chairman of the Education Committee is conducting the contest as part of the DIAMOND JUBILEE YEAR of the Illinois Society.

The conditions for the contest are as follows:

1. Contest open to both boys and girls at the above level.
2. Papers to consist of no more than 500 words.
3. Closing date for receipt of papers is April 22, 1960 as winners must be selected by May 1, 1960.
4. Papers to be judged for composition by a group of educators; for subject material by a committee of practicing engineers.
5. The winning papers will be selected on the basis of originality, conciseness, interest paper creates, grammatical excellence, and uniqueness.

There will be three winners selected. The first place winner, in addition to receiving a slide rule, will be given an all expense trip to the Diamond Jubilee Exposition, depicting 75 years of Engineering Progress, which will be held in Springfield, May 4 - May 8, 1960. Each of the winners will have his name engraved on his award in addition to receiving an engraved scroll.

## POLICY NO. A-1 ADOPTED BY I.S.P.E.

1. The Board of Direction will be the official policy-making body of the Society.
  2. Policy matters will be considered at the Annual Meeting of the Society.
  3. Policy matters may be submitted to the Board of Direction at any time. A minimum waiting period of 45 days between initial submission and actual adoption by the Board of Direction will be observed. The Board of Direction must take action within six months from date of initial submission.
  4. Each policy action of the Board of Direction will be given a serial number. Society policies dealing with professional matters will be given a "P" number. Society policies dealing with administrative matters will be given an "A" number.
  5. Each Society policy, when adopted, will state the date that it was adopted and the policy it cancels or modifies, if any.
  6. Each Society policy, when adopted, will be published in *The Illinois Engineer*.
  7. A supply of individual policies will be maintained for distribution to any member upon request.
  8. A list of Society policies, in serial order, will be included in the periodical printing of the Constitution and By-Laws and in the printing of the Annual Committee Reports.
  9. The Society will maintain one official binder of Society policies and as many additional binders as may be found necessary for the use of the board of Direction or Society Committees and members.
- Date Submitted to Board of Direction: Nov. 7, 1959.  
Date Adopted by Board of Direction: Jan. 9, 1960.



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